

REMARKS

Claims 1, 2, 4-17 and 25-34 are pending in the present application. In the Office Action mailed February 23, 2006, the Examiner rejected claims 32-34 under 35 U.S.C. §102(b) as being anticipated by Silbermann (USP 2,942,126). The Examiner next rejected claims 1, 2, 7-12 and 15 under 35 U.S.C. §103(a) as being unpatentable over Knott (USP 5,511,105). Claims 13 and 14 are rejected under 35 U.S.C. §103(a) as being unpatentable over Knott. Claims 4-6, 16 and 17 are rejected under 35 U.S.C. §103(a) as being unpatentable over Sohval et al. (USP 4,637,040). Claims 25-31 are rejected under 35 U.S.C. §103(a) as being unpatentable over Sohval et al. in view of Silbermann.

Applicant has canceled claims 1- 34. New claims 35-48 are presented herein and are believed to further define the invention over the art of record.

Specifically, the art of record fails to teach or suggest an x-ray tube assembly having multiple x-ray sources wherein a thermal stress on the x-ray sources is monitored to determine the order and manner in which a particular x-ray source is caused to emit an x-ray beam. As set forth in the newly presented claims, the claimed invention is directed, in part, to a controller that receives feedback indicative of the thermal load placed on a particular x-ray source, i.e., tungsten electrode, and controls the emission of x-ray accordingly to prevent or reduce the likelihood of x-ray source thermal overload.

Accordingly, it is believed that the art of record fails to teach or suggest an x-ray tube assembly having a plurality of independently controllable electron sources configured to emit electrons, an anode disc, a plurality of target electrodes disposed on the anode disc and configured to receive electrons emitted by the plurality of independently controllable electron sources and emit a plurality of fan beams of radiographic energy in response thereto, a thermal feedback loop operably connected to provide feedback indicative of thermal conditions of at least one target electrode, and an electron firing controller operably connected to the thermal feedback loop and configured to selectively fire the plurality of independently controllable electron sources to maintain a thermal load on the at least one target electrode below a given threshold.

Similarly, the art of record fails to teach or suggest a CT system comprising a rotatable gantry having a bore centrally disposed therein, a table movable fore and aft through the bore and configured to position a subject for CT data acquisition, a detector array disposed within the rotatable gantry and configured to detect x-radiation attenuated by the subject, an anode disc positioned within the rotatable gantry, multiple x-ray sources extending circumferentially about the anode disc and configured to project x-ray fan beams toward the subject, and a controller

operably connected to the multiple x-ray sources and configured to selectively fire the multiple x-ray sources based on respective thermal stresses on the multiple x-ray sources.

Therefore, in light of at least the foregoing, Applicant respectfully believes that the present application is in condition for allowance. As a result, Applicant respectfully requests timely issuance of a Notice of Allowance for claims 35-48.

Applicant appreciates the Examiner's consideration of these Amendments and Remarks and cordially invites the Examiner to call the undersigned, should the Examiner consider any matters unresolved.

Respectfully submitted,

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